

BACKGROUND INFORMATION

1. The Metropolitan Water District of Southern California has constructed a Dam and Reservoir in Auld Valley, Riverside County, State of California, known as Lake Skinner. Specifically, the Reservoir is located eight miles south of the community of Winchester and one-half mile east of the intersection of Washington Avenue and Benton Road. (See attached map.)

2. Lake Skinner was built to serve as a regulatory and emergency water storage facility integral with Metropolitan's San Diego Canal and Pipelines. This portion of Metropolitan's water distribution system transports over 100 billion gallons of water annually to semi-arid regions of Southern California. Lake Skinner will also serve as a public recreation area under an agreement between the County of Riverside and Metropolitan. This agreement includes development proposals for camping, fishing, and boating with related support facilities. Also proposed are picnic areas, playgrounds, hiking trails, a museum or interpretive center for the protection of historical artifacts and areas, and a wildlife preserve with water access.

3. The Dam is approximately one mile in length and 100 feet high and creates a Reservoir with a capacity of over 44,000 acre-feet with a surface area of approximately 1,140 acres, when the Reservoir is full. Capacity and surface area are plotted as functions of elevation on the accompanying graph. Initial filling of the Reservoir was accomplished by the importation of water through the San Diego Canal. All local rainfall runoff from the 52 square miles of the Tocalota Creek drainage basin which flows into the Reservoir will be released into Tocalota Creek soon after such runoff occurs.

4. Tocalota Creek is a tributary of the Santa Margarita River via the Santa Gertrudis and Murrieta Creeks. The Santa Margarita River system and the water rights applicable thereto are

currently under the continuing jurisdiction of the U.S. District Court in San Diego (United States v. Fallbrook PUD, No. 1247-SD-C). The court expressly retained jurisdiction over the impoundment of the surface waters of that river system. However, Metropolitan advised the State Water Resources Control Board on January 16, 1969, that Lake Skinner would not collect Tualota Creek flow for its use.

5. The facilities at Lake Skinner were designed to effectively pass all local runoff which originates in the basin upstream of the Dam. This design required extensive hydrologic studies over the entire area, including data such as stream parameters, topography, geology, climatology, soil characteristics, ground cover and use, precipitation, and local runoff. From these studies it was estimated that the mean annual local runoff, which occurred at the damsite, was 2,400 acre-feet. It was further estimated that the annual local runoff range over a 59-year period of record was between 15,900 acre-feet and 280 acre-feet. Respectively, these volumes have a one-percent and ninety-percent probability of exceedance.<sup>1/</sup> It has been determined that the maximum possible subsurface flow at the damsite was approximately 0.5 acre-feet per day (113 gpm or 0.25 cfs).<sup>2/</sup>

6. Now that the Dam has been constructed and the facilities are operational, it is necessary that a detailed criterion be established for the following purposes:

- a. Determining the quantity and rate of local runoff from the drainage basin above Lake Skinner.
- b. Determining the quantity of water that should be released from Lake Skinner to maintain downstream water rights

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<sup>1/</sup> W. A. Wahler & Associates. Preliminary Design Report--Auld Valley Reservoir--Part C.

<sup>2/</sup> MWD Report No. 863. Hydrology of the Auld Valley Reservoir Area.

in at least the same magnitude as existed in the absence of Lake Skinner, and providing for the release of this water into Tualota Creek downstream of the Reservoir.

c. Maintaining the groundwater level downstream of the Reservoir as close as possible to that which would have existed in the absence of Lake Skinner.

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DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Attachment A



